

LIBUA

or Logistics in Built Up Areas

Major H V C Stephens *Royal Corps of Transport*

*"G said 'I know who that refers to',
And passed the whole matter for action to Q,
Q sympathetically gave it a smile,
Remarked 'Poor old G Branch' and wrote on it 'file'."*
WIPERS TIMES
1918

It is easy to dismiss the problems of fighting in built-up areas (FIBUA) by saying that almost all modern armies will seek to avoid this time-consuming and expensive form of warfare. However, it seems that FIBUA is becoming more and more of a reality; within the British Army Review we have read of the growing urban complexes in North West Europe. It is almost inevitable that in the defence of any appreciable area in NW Europe FIBUA will play an important part, either when an urban complex forms part of the front or when towns have been by-passed by an initial attack and subsequent echelons are then left to capture them. This latter course seems the more likely and will lead to an almost siege-like operation rather similar to what might be expected should West Berlin ever come under attack. Logistic support for FIBUA is dismissed in two paragraphs at the most and in several publications is ignored completely.

The aim of this article is to study the problems of providing logistic support in the defence of built-up areas and to suggest some possible solutions.

FIBUA is costly in time, manpower and resources, it will require a prolonged effort to sustain it and logistic planning must take this into account from the outset. Movement to a very large extent will be restricted to obvious routes; nevertheless, even in an adverse air situation, concealment favours the defender and the aggressor will have limited observation and fields of fire. Fighting will be disjointed and the emphasis will be on leadership at a low level in all arms. Demands on individual initiative and courage will be high.

Non-persistent chemical weapons, whilst having some obvious political repercussions in areas of dense civilian population, are attractive to the aggressor. They will not destroy buildings and create the immense rubble problems that hampered the advance in Altona or Stalingrad. Training for FIBUA should therefore place great emphasis on chemical defence.

Preparation

Should the situation permit previous outloading and pre-positioning of stocks, there are three problems; What? Where to? and How? A very careful assessment

of the priorities is necessary. There will not be time to re-think the plan later. The first priority must be ammunition. Historically, ammunition expenditure in FIBUA has been extremely high and it is the only commodity without which the defender cannot operate.

The outloading of defence and engineer stores is likely to take second priority. This can be a sizeable problem and it will be up to the staff to decide how much is vital and how much can be left to be outloaded as a bonus at the end.

Rations must take third place to ammunition and defence stores. It is still important to outload sufficient stocks to maintain the force during a prolonged operation, although a certain amount of ration supply may be possible from local resources. Battle batteries, which are normally issued by the same method as rations, will need to take a higher priority.

The demand for POL in FIBUA will be small. There will need to be adequate stocks for plant and for static running of tanks but, after outloading, the distances involved in resupply will be small.

Once priorities have been allocated, the problem is where to dump stocks. There would be too much to hold on wheels. Obviously, defence and engineer stores would be dumped as near as possible to where they are required. Ammunition and other combat supplies pose different problems. The main options are to centralise stocks or to dump them in unit lots, which may or may not be guarded. To pool everything in one central dump is to run the risk of having a considerable portion destroyed at one time; whilst to disperse to small dumps can be expensive on manpower and, if the positions are not yet occupied, could give away part of the deployment plan. The answer seems to lie somewhere in the middle with an immediate battle reserve being dumped in unit locations (as late as possible) and second line stocks being held in one or two centralised dumps.

To ease the outloading problem there are certain measures which can be taken. Stocks, as far as possible, should be pre-packed on NATO standard pallets and should be so arranged in depots that they can be reached by materiel-handling equipment and

can be outloaded easily in any given order of priority. Second line transport should be 'flat-bedded' and restraining equipment available to secure loads. A proportion of echelon and second line vehicles should be fitted with cranes.

It may be necessary to use vehicles and drivers not normally considered as operational; for example, furniture vans could be used to outload rations or technical stores requiring protection from the weather. To drive transport it may be necessary to employ local civilians and, certainly during a period of tension before the outbreak of hostilities, it seems likely that many such drivers would be available. They should be used as much as possible to ease the fatigue problems with military drivers who, in turn, will take the brunt of the task once fighting has commenced.

Resupply and Administration

Resupply starts with self-sufficiency at unit level. This means that all units should deploy with a laid down reserve of combat supplies. The amount will vary according to the threat, the size of area and the commander's plan, but five days' stocks is likely to be the norm. This will allow all second line and some echelon vehicles to be used initially for outloading. Once the outloading is complete, unit stocks would be made up to the initial level and the re-supply system started.

Within the confines of a built-up area a full resupply chain will not be necessary. Echelon and second line vehicles will probably be grouped together and it may well be possible to release echelon vehicle drivers to return to their parent units as riflemen. Second line transport could cover the short resupply distances involved and might well be used to form immediate replenishment groups (IRGs).

An IRG is supposed to mirror the battalions A1 holding, but in this case it could become the A1 holding. It might then be more efficient if the echelon drivers were tasked by a central organisation in the Administrative Area, so ensuring that urgent demands were met quickly. This might well evolve after the initial deployment had been completed and defensive operations had settled down to a particular

area or district. Commanding Officers and Quartermasters would need to be confident that their own urgent needs were being met and this would need practice.

As already mentioned, the main demand for resupply will be for ammunition. Natures in constant demand must be kept on wheels in the administrative area and moved forward as required.

In the outloading phase it may not have been possible to move all the rations available, and, in any case, there is likely to be a requirement to find further sources. Similarly, POL will have assumed a low priority on outloading and a detailed survey will be required to find local diesel and petrol sources.

One of the most difficult questions in the resupply system is where to break bulk. The logical place is within the Force Administrative Area because this will allow the right mix of stores to move forward to the IRGs and because there will be a lack of handling equipment further forward. On the other hand, there will be a shortage of manpower within the administrative area and breaking bulk is both time and labour consuming. One way of easing this problem is to pre-pack pallets of ammunition into standard unit loads, containing a variety of natures in proportions equivalent to their likely use.

After heavy bombardment, movement by re-supply vehicles will become difficult and it may be necessary to use human (or even animal) portage for a short time. Pre-planning should include details of civilian plant likely to be available to assist in route clearance. If a formation reserve is held centrally, it is vital that the routes to deploy the reserve are kept open.

If surface movement ceases to be possible, it may be practical to use underground systems to carry out limited resupply. Underground railways, sewers (which can be up to six metres in diameter) and lines of cellars are likely to provide the most practical routes. As was discovered by the Germans in their defence of Berlin, underground systems are liable to flooding. Nevertheless, a careful reconnaissance of the whole underground system should be made at the earliest possible opportunity. It is important to ensure that underground approaches to the area are blocked

to the enemy!

The engineers will almost certainly be employed on the construction and improvement of obstacles from the outset. Once battle is joined, there are other tasks in the administrative area which will need engineer support. The continued provision of unpolluted water will become a major problem as the battle develops. The logistic plan must, therefore, include the location of known storage tanks, reservoirs, stand pipes and other sources from which suitable water can be pumped.

There will probably be no power to operate the electric pumps in petrol filling stations, so separate pumping facilities will need to be arranged. The engineers will need a good knowledge of the more common type of civilian plant so that, when necessary, requisitioned plant can be operated by soldiers.

Other engineer tasks are likely to include the maintenance of existing water, sewage and power services for as long as possible, the improvement of underground facilities and the preparation of helicopter and harrier sites and shelters.

Historically, disease has often killed more soldiers than the enemy. The medical services should be brought into the planning at an early stage to give advice and take action to promote good hygiene and health.

FIBUA will certainly produce high casualty rates. RAMC must help the staff to produce a battle casualty estimate. Based on World War Two figures for FIBUA one could expect a twelve to fifteen per cent casualty rate per day, of which seventy-five per cent would be wounded and the remainder killed. Of the wounded forty per cent would need evacuation and the other sixty per cent would be walking wounded. The key to success in the medical plan is the rapid evacuation of the wounded, thus giving the best chance of survival.

The RAMC will obviously set up the best field hospital that can be arranged under the circumstances. Ideally this would be based on a civilian hospital. Collecting sections must be detached to battalion RAPs and their ambulances will almost certainly need to be tracked to cope with the rubble

problem.

There will be a critical shortage of trained medical staff and peacetime planning will need to look at the location of existing hospitals and nursing homes and the possibility of using any trained, volunteer dependants.

Disposal of the dead, dealt with so briefly in 'Administration in the Field', is an important problem. Bodies left around will have an adverse effect on morale and hygiene. Bags, cadaver, are available, but how many units now hold them?

Once battle is joined in a built-up area it is unlikely that repair or recovery will play a vital role. The amount of movement will be limited and only operationally urgent repairs would be undertaken. Priorities are likely to be A vehicles, weapons and radios.

Much will depend on the situation, but repair forward is not likely to be so critical. It may well prove to be more effective to provide a replacement service—complete equipments being taken forward to replace those requiring repair. The latter being recovered, repaired and then held in a replacement pool.

Once outloading is completed, the Ordnance task is also likely to be quite small. A small staff will control and supervise the issue of combat supplies. These may well be drawn direct from Ordnance by unit echelon vehicles, the distances being too small to make the use of RCT transport practical. If this is the case it would be worth considering the use of RCT drivers to drive unit echelon vehicles, releasing valuable rifles for the battle.

The RAOC will also find themselves looking for local resources to supplement rations and spares.

The Military Police traditionally have two main tasks in this sort of situation: the control of movement (including civilians and refugees) and aiding the civilian police. To these we must now add chemical monitoring and survey and this could well become their major task. Movement control will not be required once the outloading has been completed but the RMP will need to ensure that refugee and civilian movement does not interfere with the military plan. They will also be required to help police the adminis-

trative area.

It is easy to dismiss the refugee problem by saying that in the type of siege scenario depicted there will be no refugees. However, refugees can effectively block a route if they are moving five hundred metres to an underground station for shelter or moving five hundred kilometres across the country. The control of refugees and the provision of food and shelter is primarily the responsibility of the civilian authorities, but if it becomes too large a problem, it becomes a military task. In this case the responsibilities are fairly well defined. The G Staff must forecast the likely numbers and then allocate units to be responsible for control and, if necessary, administration. The A Staff then organises the refugee control, issues instructions in accordance with the Geneva Convention and coordinates all activity until the civilian authorities can resume control. The Q Staff must arrange the provision of food, shelter and medical attention when required. It must also ensure that plans for refugee movement and maintenance do not conflict with the operational plan.

In isolated farms and even in small villages, the moving of the civilian population does not cause a great problem. To move an administrative area into a town is going to cause considerable disruption. First there is the problem of persuading the civilians to move (in high density areas, such as large blocks of flats – numbers will be substantial). Secondly, there is the problem of what to do with them. These are problems which are not going to be resolved quickly unless a proper plan has been made beforehand.

Logistic staff responsibilities in support of FIBUA are fairly straightforward, although the Staff need to be in even closer touch with units than in more open war, to speed up reaction times and to stay flexible. The problem is still planning and providing the daily maintenance. The plan is based simply on the size, composition and task of the force, the likely length of operations, the estimated expenditure rates and climate and weather. Local resources should be taken into account to help offset what is going to be a sizeable logistic bill.

The tendency is to regard Local Resources as food,

petrol and water but there will be much more available in a built-up area – accommodation, labour, engineer resources and plant, medical facilities and stores, transport and sewage disposal.

Ideally, pre-planning will include road, rail and water lines of communication, underground systems, large underground complexes for dumping stock (car parks, under motorway bridges etc), and local facilities such as garages and hospitals.

Communications will play a vital part in LIBUA. With the potential electronic threat which exists, every effort must be made to find alternative means of communication. The telephone is likely to remain working for some time and should be used as much as possible to minimise enemy locating and jamming. Other methods of communication include despatch riders, line, and the passage of non-urgent messages on logistic transport. Where radio must be used, short range, low power sets may escape detection, especially within a built-up area.

Morale always seems to come in the 'last but not least' paragraph at the end of any study, and here it is again. But it is not here because it is an afterthought but because if I would wish one single point to be remembered from my thoughts on LIBUA it is the importance of morale. However good the leadership, the maintenance of morale will be an enormous problem. Troops will be fighting without respite for long periods and there are likely to be few visible results other than a growing number of casualties and the gradual disruption of maintenance. A good, flexible logistic plan and the prompt evacuation and treatment of casualties can help to a very large extent to overcome the problems, as can good example and good leadership. Above all the soldiers must be told the aim and must be kept informed of the situation.

Conclusions

FIBUA brings its own special logistic problems. Many recognised systems and methods are discarded and logistic support depends on careful planning, resourcefulness and flexibility. History shows that a long effort will be required and, to sustain this, outloading must be planned in detail and must follow

strict priorities. Once battle is joined, resupply must be kept to a simple system, allowing stocks to remain under cover for as long as possible. Movement will become difficult and the engineer effort required will increase.

All the services have a vital role to play and the Staff has a considerable planning task if it is to be properly prepared for war. Care needs to be taken to ensure that refugees and other civilians do not impede these carefully laid plans.

The principles of administration are perhaps more clearly important in FIBUA than in any other form of warfare. Without foresight and considerable planning effort, the battle will fail at an early stage. Priorities must be carefully assessed to make the most economical use of resources, cooperation and flexibility must be the keywords. The battle will be complicated and confused but the logistic plan must, above all, be simple and effective.